## NEVADA STATE BOARD OF PHARMACY

# IMMUNIZATION REPORT

April 1, 2010 - March 31, 2011

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#### INTRODUCTION

A copy of this report is available from the Board of Pharmacy on request.

This report, mandated by Nevada Revised Statue (NRS) 639.065, will look at Nevada's immunization levels compared to national levels and review current administrative code changes to improve the health of the people of Nevada by improving access to pharmacists who provide immunizations and by expanding the role of pharmacists in administering immunizations under physician protocol.

NRS 639.065 Annual report concerning immunizations administered by pharmacists.

The Board shall prepare an annual report concerning immunizations administered by pharmacists that includes, without limitation, the number of immunizations which were administered by pharmacists during the previous year, any problems or complaints reported to the Board concerning immunizations administered by pharmacists and any other information that the Board determines would be useful in determining whether pharmacists should continue to administer immunizations in the State. The report must be available for public inspection during regular business hours at the office of the Board. (Added to NRS by 1999, 2722)

Nevada remains one of least immunized states in the nation. In the interest of better serving the people of Nevada, NRS 454.213 (18) regulated through the Nevada State Board of Pharmacy, authorizes pharmacists with the proper training to administer vaccinations to patients.

NRS 454.213 addresses a pharmacist's authority to possess and administer dangerous drug. [Effective January 1, 2008.]

- 18. In accordance with applicable regulations of the Board, a registered pharmacist who:
- (a) Is trained in and certified to carry out standards and practices for immunization programs;
- (b) Is authorized to administer immunizations pursuant to written protocols from a physician; and
- (c) Administers immunizations in compliance with the "Standards of Immunization Practices" recommended and approved by the United States Public Health Service Advisory Committee on Immunization Practices.

#### THE STATE OF IMMUNIZATIONS IN THE STATE OF NEVADA

Estimated Vaccination Coverage\* with Individual Vaccines and Selected Vaccination Series
Among Children 19-35 Months of Age by State and Local Area
US, National Immunization Survey, Q1/2009-Q4/2009†

	United States compared to Nevada						
	3+DTaP‡	4+DTaP§	3+Polioll	1+MMR¶	3+Hib**	3+Hib-S††	Hib by brand‡‡
US	95.0±0.6	83.9±1.0	92.8±0.7	90.0±0.8	83.6±1.0	92.1±0.8	54.8±1.4
NV	88.6±4.3	75.5±5.8	85.8±4.8	86.3±4.6	76.8±5.4	87.4±4.2	50.9±6.8

	3+HepB§§	Hep B Birth dosellll	1+Var¶¶	3+PCV***	4+PCV†††	2+HepA‡‡‡	Rotavirus§§§
US	92.4±0.7	60.8±1.3	89.6±0.8	92.6±0.7	80.4±1.1	46.6±1.4	43.9±1.4
NV	87.7±4.3	72.3±5.8	83.4±4.9	84.5±4.9	75.1±5.7	49.1±6.8	34.4±6.4

			4:3:1:3:3:1-			4:3:1:3:3:1:4-	
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US	81.5±1.1	69.9±1.2	75.7±1.2	48.3±1.4	63.6±1.3	69.0±1.3	44.3±1.4
NV	72.7±6.0	59.4±6.5	65.8±6.2	41.9±6.7	54.7±6.6	60.6±6.4	39.3±6.7

	4:3:1:0:3:1:4€€€	4:3:1:0:3:1:4- 2008ςςς
US	70.5±1.2	70.6±1.2
NV	62.6±6.5	55.2±7.0

<sup>\*</sup> Estimate=NA (Not Available) if the unweighted sample size for the denominator was <30 or (CI half width)/Estimate > 0.6, otherwise estimates are presented as point estimates (%)  $\pm$  95% confidence intervals. NA for 2008 indicate areas that were not sampled in 2008 or not comparable to 2009.

¥ US National estimates include the 50 States plus DC, and exclude the Virgin Islands.

<sup>&</sup>lt;sup>†</sup> Children in the Q1/2009-Q4/2009 National Immunization Survey were born between January 2006 and July 2008.

<sup>&</sup>lt;sup>‡</sup> 3 or more doses of any diphtheria and tetanus toxoids and pertussis vaccines including diphtheria and tetanus toxoids, and acellular pertussis vaccine (DTaP).

<sup>§ 4</sup> or more doses of DTaP.

<sup>&</sup>lt;sup>11</sup> 3 or more doses <u>of any poliovirus vaccine.</u>

<sup>&</sup>lt;sup>¶</sup> 1 or more doses of measles-mumps-rubella vaccine.

<sup>\*\* 3</sup> or more doses of *Haemophilus influenzae* type b (Hib) vaccine.

<sup>\*\* ≥2</sup> or ≥3 doses of Haemophilus influenzae type b (Hib) vaccinefor the primary series, depending on brand type.

 $<sup>^{\</sup>pm\pm}$   $\geq$ 3 or  $\geq$ 4 doses of Hib vaccine depending on product type received (includes primary series plus the booster dose).

<sup>§§ 3</sup> or more doses of hepatitis B vaccine.

<sup>&</sup>lt;sup>IIII</sup> 1 or more doses of hepatitis B vaccine administered between birth and age 3 days.

<sup>&</sup>lt;sup>¶¶</sup> 1 or more doses of varicella at or after child's first birthday, un<u>adjusted for history of varicella illness.</u>

<sup>\*\*\* 3</sup> or more doses of pneumococcal conjugate vaccine (PCV).

<sup>†††</sup> 4 or more doses of PCV.

<sup>‡‡‡</sup> 2 or more doses of Hepatitis A vaccine.

555 ≥2 or ≥3 or more doses of Rotavirus vaccine, depending on product type received (≥2 doses for Rotarix® [RVI] or ≥3 doses for RotaTeq® [RV5].

4 or more doses of DTaP, 3 or more doses of poliovirus vaccine, and 1 or more doses of any MMR vaccine.

4:3:1 plus 3 or more doses of Hib vaccine of any type, 3 or more doses of HepB vaccine, and 1 or more doses of varicella vaccine.

\*\*\*\* 4:3:1 plus ≥2 or ≥3 doses of Hib vaccine depending on brand type (primary series only), 3 or more doses of HepB, and 1 or more doses of varicella vaccine.

€ 4:3:1 plus ≥3 or ≥4 doses of Hib vaccine, depending on brand type (primary plus booster dose), 3 or more doses of HepB vaccine, 1 or more doses of varicella vaccine.

 $\varsigma$  4:3:1 plus  $\geq$ 3 doses of Hib vaccine of any type, 3 or more doses of HepB, 1 or more doses of varicella vaccine, and 4 or more doses of PCV.

€€ 4:3:1 plus ≥2 or ≥3 doses of Hib vaccine depending on brand type (primary series only), 3+ doses of HepB vaccine, 1+ doses of varicella vaccine, and 4+ doses of PCV.

 $\zeta\zeta$  4:3:1 plus  $\geq$ 3 or  $\geq$ 4 doses of Hib vaccine depending on brand type (primary plus booster dose), 3 or more doses of HepB, 1 or more doses of varicella vaccine, and 4 or more doses of PCV.

€€€ 4:3:1 plus 3 or more doses of HepB vaccine, 1 or more doses of varicella vaccine, and 4 or more doses of PCV. Hib vaccine is excluded.

ςςς 2008 estimates for 4:3:1 plus 3 or more doses of HepB vaccine, 1 or more doses of varicella vaccine, and 4 or more doses of PCV. Hib vaccine is excluded.

Table data: http://www.cdc.gov/vaccines/stats-surv/nis/data/tables 2009.htm

### Vaccine-Preventable Diseases, May 2009 ACIP: Advisory Committee on Immunization Practices

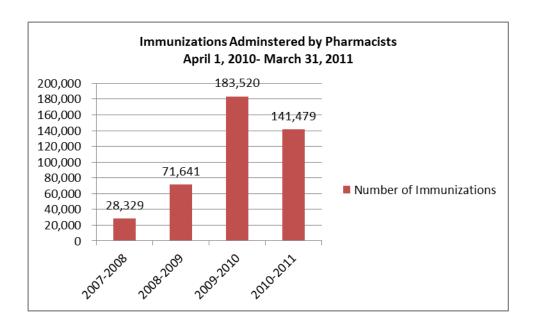
Anthrax	<u>Measles</u>	<u>Rubella</u>
Cervical Cancer (Human Papillomavirus)	<u>Meningococcal</u>	Shingles (Herpes Zoster)
<u>Diphtheria</u>	Monkeypox (Smallpox vaccine used)	Smallpox
Hepatitis A	<u>Mumps</u>	<u>Tetanus</u>
Hepatitis B	<u>Pertussis</u>	<u>Typhoid</u>
Haemophilus influenzae type b (Hib)	<u>Pneumococcal</u>	<u>Tuberculosis</u> (TB)
<u>Human Papillomavirus</u> (HPV)	Polio	<u>Varicella</u> (Chickenpox)
Influenza (Flu)	Rabies	Yellow Fever
Japanese encephalitis (JE)	Rotavirus	

Table Data: <a href="http://www.cdc.gov/vaccines/vpd-vac/vpd-list.htm">http://www.cdc.gov/vaccines/vpd-vac/vpd-list.htm</a>

#### **PHARMACIST ADMINISTERED IMMUNIZATIONS**

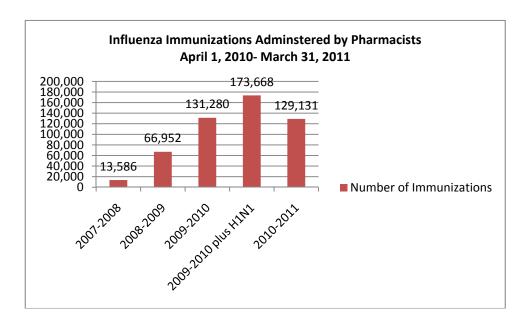
The following table is the most accurate data available on immunizations administered by pharmacists in the time frame of this report (April 1, 2010– March 31, 2011).

Vaccines	
Anthrax	0
Hepatitis A	103
Hepatitis B	85
[Hepatitis A Inactivated & Hepatitis B (Recombinant) Vaccine] TWINRIX ®	39
Herpes Zoster (shingles)	5,829
HIB (Haemophilus influenza type b)	0
HPV (Human Papillomavirus)	143
Influenza(includes nasal)	129,131
Japanese encephalitis (JE)	1
Measles Mumps Rubella (MMR)	132
Meningococcal diseases	50
Tetanus-Diptheria-Pertussis Tdap	662
Pneumococcal diseases	5,144
Polio	2
Rabies	1
Rubella	0
Rotavirus	0
Smallpox	0
Tetanus/Diptheria Td	85
Typhoid	37
Varicella (chickenpox)	34
Yellow Fever	1
Other	0
Total doses administered	143,479



Note: The number of influenza immunizations administered in the 2009-2010 flu season included separate vaccinations for the seasonal, 131,280 vaccinations, and H1N1, 42,438 vaccinations. The total influenza immunizations administered were 173,718.

In the 2010-2011 flu season the H1N1 vaccine was included in the seasonal influenza vaccine. The total doses administered of the seasonal vaccine were 129,131, comparable to the 131,280 administered in the 2009-2010 season.



There were no adverse reactions reported.

#### **CENTRALIZED RECORDKEEPING**

LCB file R115-08 adopted by the Board made changes to reporting requirements under NAC 639.2976. These changes simplified the reporting requirements, requiring only reporting to the Immunization Information System established by the Department of Health and Human Services.

This data may be entered electronically directly into WebIZ or manually through the use of a written form. In addition to mandatory reporting as of July 1, 2009, all providers must give both children and adults a form that explains the purpose of the registry and allows them to opt-out of inclusion in the registry.

#### NRS 439.265: Reporting vaccinations to Nevada WebIZ

Effective January 28, 2010 all ACIP recommended vaccinations administered to children and adults must be recorded in Nevada WebIZ. This means that patients of all ages who receive a vaccination must be entered in Nevada WebIZ. Some providers have thought that the law only applies to VFC (Vaccines for Children) vaccines. The law requires entry for all vaccines, regardless of purchase method.

Individuals may "opt-out" by completing the Participation Form and the provider must mail or fax the form to the WebIZ program.

Go to the "Reports/Forms" page in Nevada WebIZ to download and study the new regulations, forms & instructions.

http://health.nv.gov/Immunization WebIZ Policies Forms.htm

The text of the regulation (R094-09A) can also be found at:

http://leg.state.nv.us/register/indexes/2009 NAC REGISTER NUMERICAL.htm

WebIZ Contact Information: For more information, including how to participate, please contact:

Erin Seward Manager (775) 684-3209	Victor Lamas, HelpDesk Specialist (775) 684-5954 1-877-689-3249
Amanda (Mandy) Harris	Marie Tasker
HelpDesk Manager (775) 684-4258	S. NV Training Manager (702) 933-7328
Janet Osalvo	
N.NV Training Manager 775-684-5996	

#### **IMMUNIZATION CHANGES/RECOMMENDATIONS**

- Recommendations of the Advisory Committee on Immunization Practices (ACIP), 2010 (August 6, 2010).
- Who should get vaccinated?
  - All persons aged ≥6 months should be vaccinated annually.
  - Protection of persons at higher risk for influenza-related complications should continue to be a focus of vaccination efforts as providers and programs transition to routine vaccination of all persons aged ≥6 months.
  - When vaccine supply is limited, vaccination efforts should focus on delivering vaccination to persons who:
  - are aged 6 months–4 years (59 months);
  - are aged ≥50 years;
  - have chronic pulmonary (including asthma), cardiovascular (except hypertension), renal, hepatic, neurologic, hematologic, or metabolic disorders (including diabetes mellitus);
  - are immuno-suppressed (including immuno-suppression caused by medications or by human immunodeficiency virus);
  - are or will be pregnant during the influenza season;
  - are aged 6 months–18 years and receiving long-term aspirin therapy and who therefore might be at risk for experiencing Reye syndrome after influenza virus infection;
  - are residents of nursing homes and other chronic-care facilities;
  - are American Indians/Alaska Natives;
  - o are morbidly obese (body-mass index ≥40);
  - are health-care personnel;
  - are household contacts and caregivers of children aged <5 years and adults aged ≥50 years, with particular emphasis on vaccinating contacts of children aged <6 months; and</li>
  - are household contacts and caregivers of persons with medical conditions that put them at higher risk for severe complications from influenza.

- This represents an expansion of the previous recommendations for annual vaccination of all adults aged 19—49 years and is supported by evidence that annual influenza vaccination is a safe and effective preventive health action with potential benefit in all age groups.
- By 2009, annual vaccination was already recommended for an estimated 85% of the
  U.S. population, on the basis of risk factors for influenza-related complications or
  having close contact with a person at higher risk for influenza-related complications.
  The only group remaining that was not recommended for routine vaccination was
  healthy non-pregnant adults aged 18–49 years who did not have an occupational risk
  for infection and who were not close contacts of persons at higher risk for influenzarelated complications.
- <u>Final CDC Recommendations from Advisory Committee on Immunization Practices</u>
  (ACIP) (published in MMWR Morbidity and Mortality Weekly Report)
  - o <u>Vaccine specific recommendations from ACIP</u>
    - Updated Tdap Vaccine Recommendations from the ACIP, 2010 NEW JAN 2011
    - Updated Recommendations for Use of Meningococcal Conjugate Vaccines - (ACIP), 2010 NEW JAN 2011
    - Prevention of Pneumococcal Disease Among Infants and Children -- Use of PCV13 & PPSV23 NEW DEC 2010
- Updated recommendations can be found at: http://www.cdc.gov/vaccines/pubs/ACIP-list.htm

Prior to administering any vaccine, review and understand the complete manufacturer literature.

#### **CONCLUSION**

In addition to increasing accessibility and with the changing recommendations increasing the number of individuals who should be immunized, the burden on other healthcare professionals is reduced by allowing and encouraging pharmacists to participate in immunization administration. As changes are made to NRS 439.265 and NAC 639.297, healthcare providers administering immunizations must be aware of new or updated recordkeeping requirements as well as changes with regards to the current recommended age and other requirements for vaccines the healthcare provider administers.

Website Information:

#### CDC:

Immunization schedules

http://www.cdc.gov/vaccines/recs/schedules/default.htm

 $\label{lem:communication} \textbf{Advisory Committee for Immunization Practices (ACIP) Recommendations}$ 

http://www.cdc.gov/vaccines/pubs/ACIP-list.htm

Nevada State Health Division:

WebIZ contact information

http://health.nv.gov/Immunization ContactUs.htm#WebIZContact

**Nevada Immunization Coalition** 

http://www.immunizenevada.com